

Title (en)

METHOD AND SYSTEM FOR DETERMINING AND MANAGING BOIL-OFF RATE

Title (de)

VERFAHREN UND SYSTEM ZUR BESTIMMUNG UND VERWALTUNG EINER ABDAMPFRATE

Title (fr)

PROCÉDÉ ET SYSTÈME DE DÉTERMINATION ET DE GESTION DES TAUX D'ÉVAPORATION

Publication

**EP 3368813 A1 20180905 (EN)**

Application

**EP 16795399 A 20161024**

Priority

- FI 20155761 A 20151026
- FI 2016050746 W 20161024

Abstract (en)

[origin: WO2017072408A1] Disclosed is a method and system for determining a momentary boil-off rate for a storage tank (150, 200) for a natural gas in liquid phase and gas phase. A mass flow from the gas phase (202) of the natural gas at an discharge pipeline (220) of the storage tank and a mass flow into the liquid phase (204) of the natural gas at an loading/discharge pipeline of the storage tank is determined. A volume, a temperature and a pressure of the gas phase of the natural gas is measured. A dynamical model is applied to the determined values to determine the momentary boil-off rate.

IPC 8 full level

**F17C 1/00** (2006.01)

CPC (source: EP FI US)

**F17C 1/00** (2013.01 - EP FI US); **F17C 13/02** (2013.01 - US); **F17C 13/04** (2013.01 - US); **F17C 13/082** (2013.01 - US); **F17C 2221/033** (2013.01 - US); **F17C 2223/0123** (2013.01 - US); **F17C 2225/013** (2013.01 - US); **F17C 2250/032** (2013.01 - EP US); **F17C 2250/034** (2013.01 - EP US); **F17C 2250/0408** (2013.01 - EP US); **F17C 2250/0421** (2013.01 - EP US); **F17C 2250/043** (2013.01 - EP US); **F17C 2250/0439** (2013.01 - EP US); **F17C 2250/0443** (2013.01 - EP US); **F17C 2250/0447** (2013.01 - EP US); **F17C 2250/0491** (2013.01 - EP US); **F17C 2250/0495** (2013.01 - EP US); **F17C 2250/0694** (2013.01 - EP US); **F17C 2265/03** (2013.01 - EP US)

Citation (search report)

See references of WO 2017072408A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2017072408 A1 20170504**; EP 3368813 A1 20180905; EP 3368813 B1 20210421; FI 20155761 A 20170427; US 10808887 B2 20201020; US 2018313498 A1 20181101

DOCDB simple family (application)

**FI 2016050746 W 20161024**; EP 16795399 A 20161024; FI 20155761 A 20151026; US 201615770243 A 20161024